

other fixative tried (except B-15\*), but is hard on the rest of the tissues and shrinks heavily.

"Anilin oil is an excellent substitute for the higher alcohols.

"Xylol shrinks tissues more than the vegetable oils."

#### VISUAL EFFICIENCY IN THE USE OF OPTICAL INSTRUMENTS

Purkis (J. R. M. S., June 1916) makes some good practical working suggestions for those who use the microscope for prolonged observations, where necessity of accurate observation and minimum fatigue are necessary.

1. The fact that only one plane is in sharp focus at a time and that other planes show dimly tempts the novice to strain the eye in the effort to make it see things which are not clearly in focus, instead of adjusting the distance.

2. This suggests also that care should first be taken to discover the limitations of the instrument which cannot be corrected by manipulation and to accept these, refusing to try to make the eye compensate for these limitations, by intensely close observation.

3. The eye should look at the field almost casually. What it cannot see by looking quietly at the object, it cannot see by an intense and strained gaze.

4. Recognizing that there is a certain amount not only of shock to the eye in sudden changes from dark to light luminosities and conversely, but also strain of the eye in the effort to see well before the re-adjustment is completed, it is important to avoid so far as possible sudden changes of luminosity. In this connection it is well (a) to see that the illumination of the room is not in too great contrast with that of the instrument; (b) to modify luminosity to compensate when passing from one objective to another; (c) to avoid sharp contrasts of luminosity within the field itself; and (d) when resting the eye preparatory to observation or during observation to do so in approximately the same illumination to be used in the field of the instrument.

---

\*B-15 is a picro-formol chrome-acetic mixture in urea:

Picric acid .....	75cc
Formol .....	25cc
Acetic acid .....	5cc
Chromic acid (crystal).....	1.5 grams
Urea .....	2.0 grams